CyberData
The IP Endpoint Company

Leap Telecom Configuration Guide: Loudspeakers

Leap Telecom Configuration Guide: Loudspeakers
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Revision Information

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1.0 Supported CyberData Products

This section describes the products used for interoperability testing with Leap Telecom.

Table 1-1: Supported CyberData Products

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
SIP IP66 INDOOR/OUTDOOR HORN	011457	12.2.0 or later
SIP LOUDSPEAKER AMPLIFIER (AC-POWERED)	011404	12.1.0 or later
SIP LOUDSPEAKER AMPLIFIER	011405	12.1.0 or later
SIP PAGING AMPLIFIER	011324	12.1.0 or later

2.0 Before You Start

Network Advisories

Leap Telecom Calling uses a Fully Qualified Domain Name (FQDN) for the SIP server. The CyberData loudspeaker needs to perform a DNS query to resolve the IP address of the Leap Telecom SIP Server's FQDN.

In addition, be sure to verify the following ports are available for the device to use:

- UDP 5060 (SIP)
- TCP 5060, 5061 (SIP)
- UDP 10500 (RTP)

The loudspeaker will need to traverse the public internet in order to operate with Leap Telecom in the cloud.The device's paging and nightringer extension uses SIP port 5060 to send and receive SIP messages.

SIP ports 5060 and RTP port 10500 are the default values on all noted firmware levels. Alternatively, SIP ports are configurable on the **SIP** page of the web interface. The RTP port setting on the **SIP** page is used for both extensions.

Product Documentation and Utilities

Before you start, download the Operation and Quick Start guides from the speaker's product webpage:

SIP IP66 Indoor/Outdoor Horn (011457)
https://www.cyberdata.net/collections/sip/products/011457

SIP Loudspeaker Amplifier (AC-Powered) (011404)
https://www.cyberdata.net/collections/sip/products/011404

SIP Loudspeaker Amplifier (PoE) (011405)
https://www.cyberdata.net/collections/sip/products/011405

SIP Paging Amplifier (011324)
https://www.cyberdata.net/collections/sip/products/011324

The CyberData Discovery Utility can be used to locate CyberData devices on your network. You may download it from the following web address:
https://www.cyberdata.net/pages/discovery

Note: DHCP addressing mode is enabled on default on all noted firmware levels.

3.0 Setting up a Device in the Leap Tel System

This section outlines how to create a device in the Leap Tel system.

1. Login to the Leap system
2. Mouse over instances and select the site/instance where the device will be used.

Figure 3-1: Instance Selection
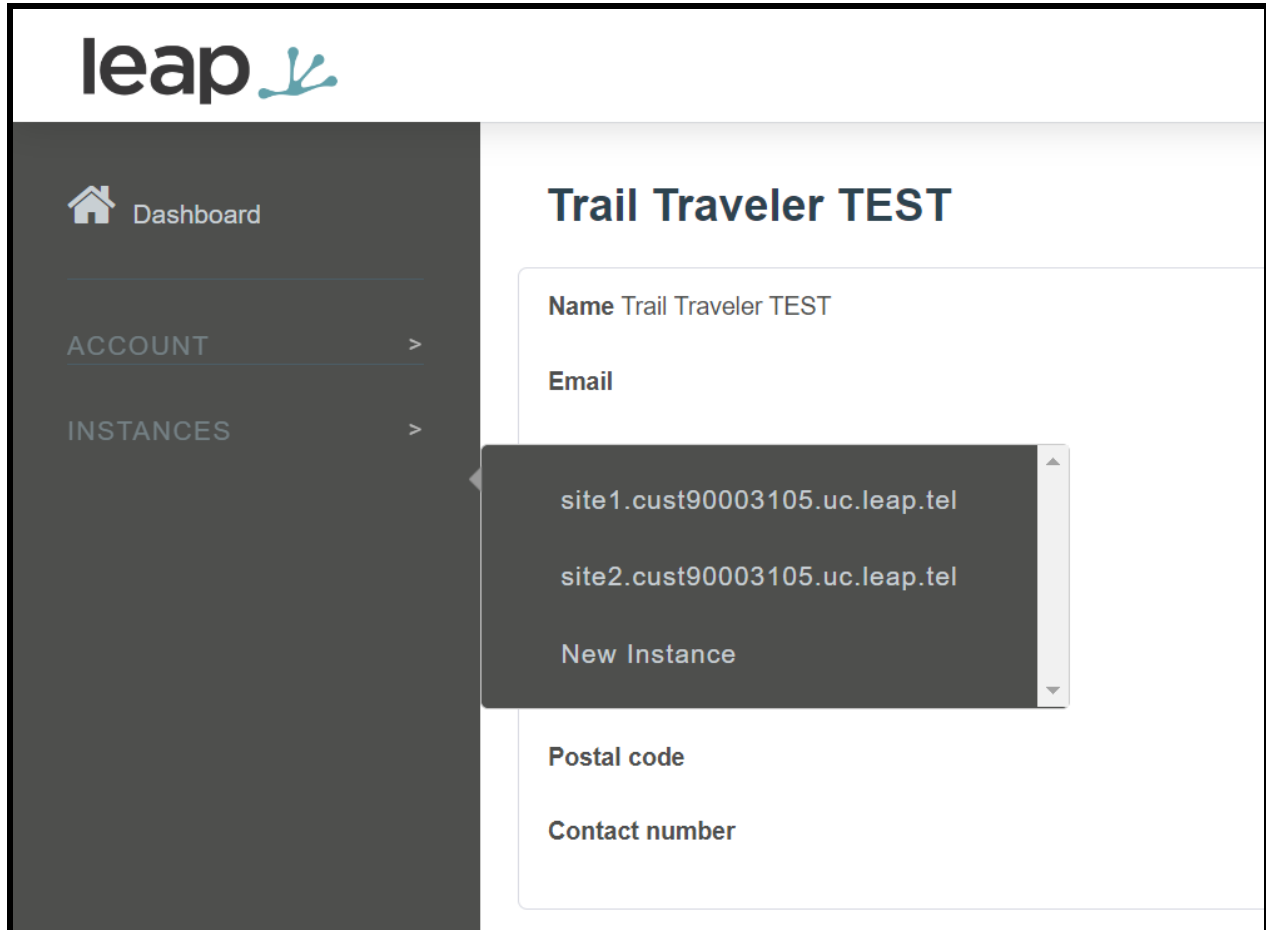
3. From the site page select **Devices**, then press the **+** button to create a new device.

Figure 3-2: Workspaces Page

4. Set the **Name** of the device, being descriptive can help for device management in the future.
5. Set the **Login** field as desired, CyberData recommends not using spaces, hyphens, or underscores.
6. Press **Save** at the bottom of the page.

Figure 3-3: Add a Device

New device

Name ⓘ

CyberData Paging Amp

Login ⓘ

Paging_Amp|

Password ⓘ   REGENERATE PASSWORD

GmxNcaCX47kz7orYWzk2

7. After pressing save the page will refresh, click on **Extensions**.
8. In the **Extensions** section press the **+** to create a new extension.

Figure 3-4: Pick a device

Extensions   9 -

Search: [   ]

Name	Number	Edit	Delete	Origins	Routing
CyberData Ring Group	3004	✏	🗑	≡	📖
Kerry Home Speaker	4001	✏	🗑	≡	📖
Cyber Intercom	3006	✏	🗑	≡	📖
CyberNight	3008	✏	🗑	≡	📖
CallButton	3010	✏	🗑	≡	📖
PaulSoftphone	3011	✏	🗑	≡	📖
Sales Conference Room Ext	4002	✏	🗑	≡	📖
Kerry	1002	✏	🗑	≡	📖
Ted	2005	✏	🗑	≡	📖

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9. In the New extension window set a **Name** for the extension. CyberData recommends having the name correlate to the device that will use the extension.
10. Set the **Number** as desired.
11. Set the **Destination** to the **Name** of the device set in step 4.
12. Press **Save.**

Figure 3-5: New Extension Creation

Configuration on the Leap Tel side is now complete and the CyberData device is ready to be configured. Values set on the Device tab are required for registration, CyberData recommends opening up the Device created in steps 3 - 6 for ease of copy and pasting.

4.0 Setting up the CyberData Loudspeaker

This section outlines the required sections for the CyberData device and how the credentials supplied from Leap correlate to the CyberData settings. For the purposes of the document the loudspeaker is used to illustrate how to setup the device. There is no difference in configuration for the SIP Paging Amplifier, SIP Loudspeaker Amplifier, or the SIP IP66 Indoor/Outdoor Horn.
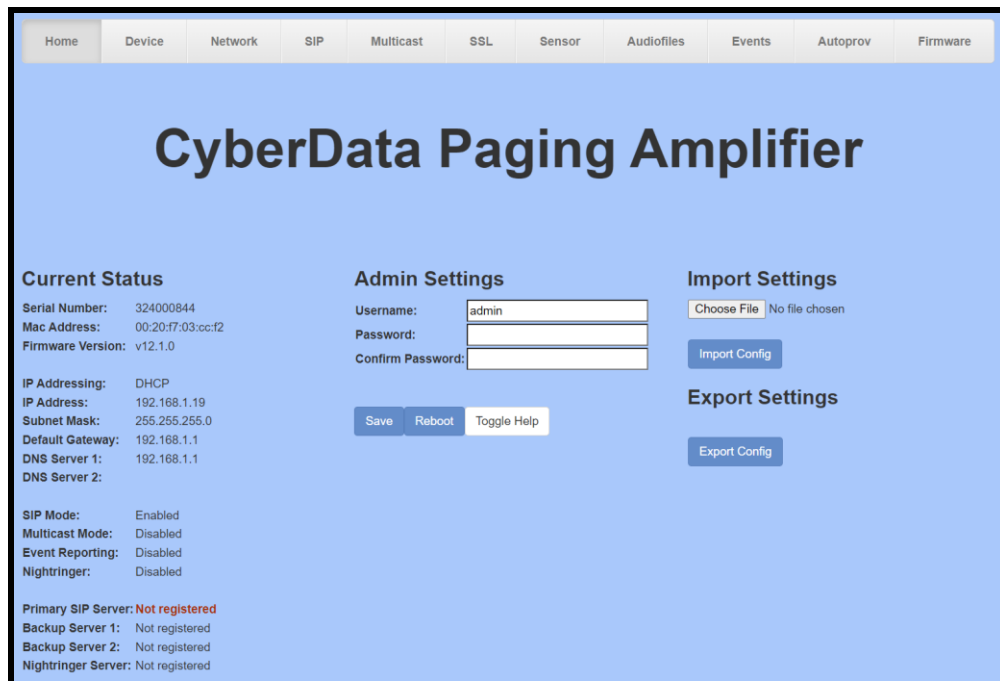
Table 4-1: SIP Credential Explanation

Leap Credential	CyberData Setting
Instance	Primary SIP Server
Device Login	Primary SIP User ID
Device Login	Primary SIP Auth ID
Device Password	Primary SIP Auth Password

CyberData's default login credentials are:
Username: admin
Password: admin

1. Log into the web interface of the CyberData device.

Figure 4-1: Home Tab

2. Navigate to the SIP tab.
3. Set the **Primary SIP Server** field to the FQDN of the Instance.
4. Set the **Primary SIP User ID** to the Device Login set in step 3-5.
5. Set the **Primary SIP Auth ID** to the Device Login set in step 3-5.
6. Set the **Primary SIP Auth Password** to the Device Password.

Note: Leap Tel supports both UDP and TCP for SIP Transport. Please use either of the transport protocols, during testing CyberData found that TCP preforms best.

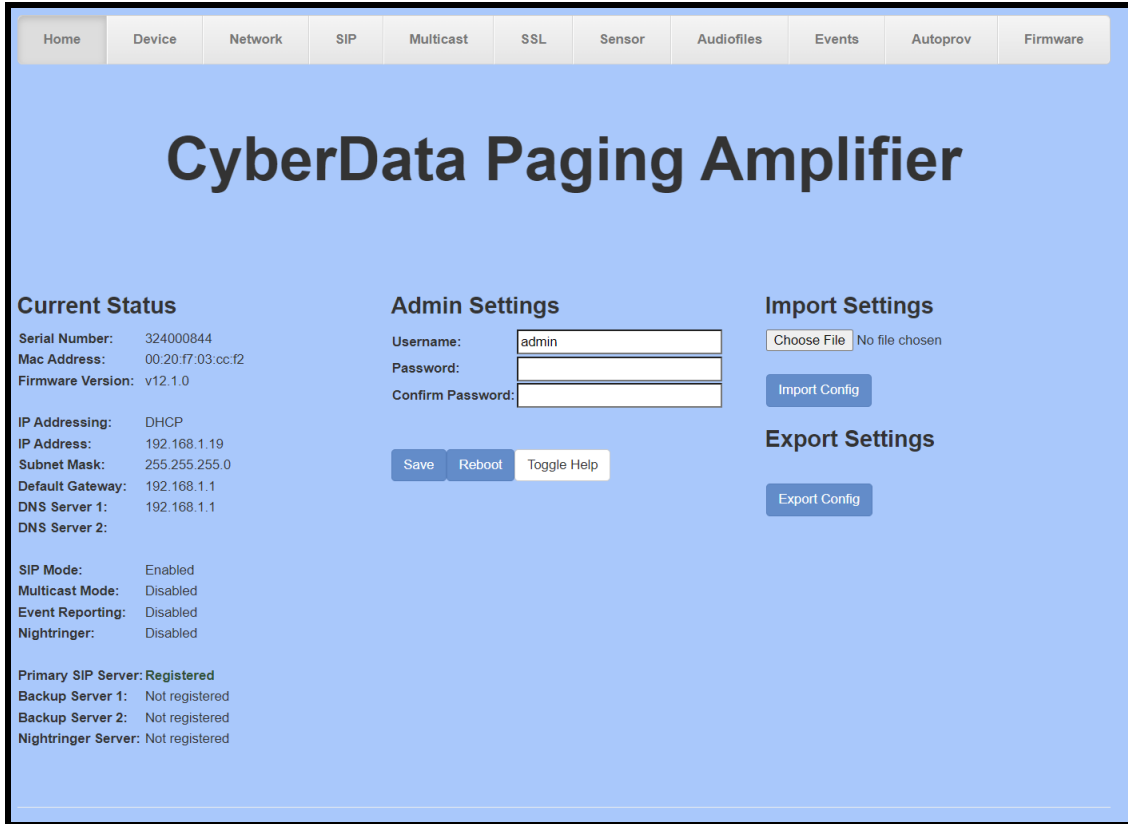7. Save and Reboot.

Figure 4-2: SIP Tab

If the credentials have been entered correctly the device should now be registered with Leap. This can be verified on the home tab of the web interface or on the Leap Device page.

Figure 4-3: Home Tab – Registered

5.0 Using a CyberData Loudspeaker in a Leap Telecom system.

CyberData loudspeaker are designed with IP Paging in mind. Supporting both SIP and Multicast that allows the loudspeakers to work with individual addressability or mass notification scenarios.

5.1 Setting up a Multicast priority

CyberData devices support multicast that works in a priority system, where a higher priority will always supersede a lower priority. For example, a multicast page to priority 4 would play over a background music stream at priority 0. SIP Calls are treated as priority 4.5.

CyberData devices also have an Emergency Multicast Priority, priority 9, which will always play at max volume regardless of setting, by design.

Figure 5-1: Multicast Tab

Multicast Settings

Enable Multicast Operation: ☑

Priority	Address	Port	Name	Buffer	Beep	Relay
9	239.168.3.10	11000	Emergency		☐	☐
8	239.168.3.9	10000	MG8	☐	☐	☐
7	239.168.3.8	9000	MG7	☐	☐	☐
6	239.168.3.7	8000	MG6	☐	☐	☐
5	239.168.3.6	7000	General Announcements	☐	☐	☐
4	239.168.3.5	6000	MG4	☐	☐	☐
3	239.168.3.4	5000	MG3	☐	☐	☐
2	239.168.3.3	4000	MG2	☐	☐	☐
1	239.168.3.2	3000	MG1	☐	☐	☐
0	239.168.3.1	2000	Background Music	☐	☐	☐

Polycom Default Channel [1 ⌄]
Polycom Priority Channel [24 ⌄]
Polycom Emergency Channel [25 ⌄]

6.0 Setup Diagram

Figure 6-1: Interoperability Test Infrastructure
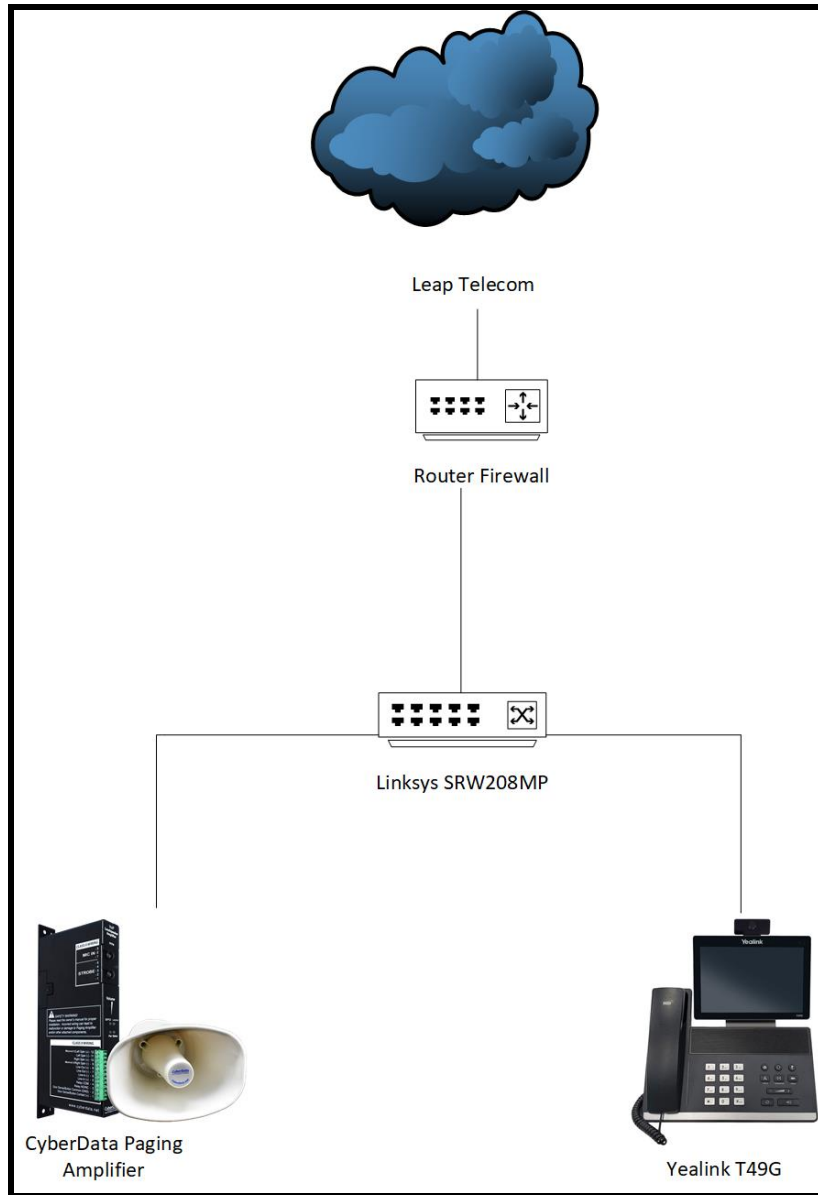
7.0 Contact CyberData Corporation

Sales

For sales-related questions, please visit our Contact CyberData Sales web page for more information.

Technical Support

For CyberData Technical Support, please submit a Contact CyberData VoIP Technical Support form on our website.

The CyberData VoIP Technical Support Contact form initiates a troubleshooting ticket which CyberData uses for quality assurance purposes.

Additionally, the Contact VoIP Tech Support form tells us which phone system you are using, the make and model of the network switch, and other essential troubleshooting information we need to efficiently assist with a resolution. Please also include as much detail as possible in the Describe Problem section of the form. Your installation is extremely important to us.

Documentation Feedback

We realize changes to the software or hardware of the Leap Telecom solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.